



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

KARPINSKI'S "ÜBERSICHT DER PHYSIKE-GEOGRAPHISCHEN VERHÄLTNISSE DES EUROPÄISCHEN RUSSLANDS."¹—This brochure, with its series of small maps, is a valuable addition to our knowledge of Russian geology. At the outset the author states the curious fact, that even the oldest sedimentary rocks of Russia have not been altered, clay and sand being recognizable even in Cambrian strata, and a layer beneath the sediments of the coal formation being in some places recognizable physically and chemically as turf. Crystalline gneiss comes to the surface in Finland, Olonetz and Archangel, also in Volhynia, Podolia, Cherson, etc., in the south of Russia. Crystalline rocks are met with at a depth of 100 Russian fathoms below St. Petersburg, and at 300 to 500 fathoms below Moscow.

The oldest sedimentary strata (Cambrian) are the plastic clays of the St. Petersburg and Esthonian governments. Upper Silurian sediments occur in localities distant from each other, in the governments just named, in the south of Poland, and in three points on the eastern limits of European Russia. There can be little doubt that the Cambro-Silurian sea extended across the centre of Russia, from the Baltic to the Ural. In Upper Silurian times this sea had become much smaller, and was for the most part limited to the west near the Baltic, with an outline in Podolia and northern Bessarabia. Upper Silurian beds also reappear in the north. Thus at the commencement of the Devonian probably almost all European Russia was dry land, though sea spread from the Urals far over Asia. The fauna of this eastern Lower Silurian sea strikingly resembles that of the basin of the same age in Western Europe, though separated from it by 200,000 square versts of Middle and Upper Devonian strata. This later Devonian sea extended from the Arctic Ocean to the Caspian region. Only about 150 species of invertebrates are as yet known from the Devonian of Russia, whilst almost three times this number occur in Belgium. During the Carboniferous period the greater part of Russia was covered by the ocean, though the coast had advanced eastward since the Upper Devonian. This Carboniferous sea spread westwards over Asia to the Irtysh and Altai.

In Permian times parts of Cawland and Poland were covered by the sea; but, though the eastern coast of European Russia was pushed forward considerably, an unbroken sea still covered eastern Russia from the Arctic to the Caspian. The Siberian sea probably became dry land before the beginning of the Permian. The main Permian sea probably communicated with that in the region of the Aracco by a strait on the site of the Caspian. In Triassic times this sea still farther dwindled, until finally it became a network of

¹ Übersicht der Physike-geographischen Verhältnisse Europäischen Russland während der verflossenen an geologischen Perioden. Von A. Karpinski, a. d. "Beitragen s. Kennt. d. Russ. Reiches. u. d. angrenzenden Lander Asicris." St. Petersburg. 1887.

separate basins. This change, commenced in the Permian, ended by converting into dry land all European Russia except the south-west part of Poland. During the Middle Trias, Upper Trias, and Lower Jurassic, the land surface of Russia was much as now, except that marine beds occur in southern Poland, and Liassic beds in the Crimea and Caucasus. In Upper Jurassic times the sea again spread over a large part of Russia, probably commencing in the west, as is evidenced by typical Middle Jurassic strata in that quarter. The similarity of the fossil forms of this wide-spread sea, which stretched from the Arctic to the Caspian, and covered most of the Caucasus, to those of Western Europe indicates free communication. At the end of the Jurassic period the area of this sea became much narrowed by the advance eastward of its eastern coast line, yet still communicated with the Jurassic waters of Western Europe until the Upper Volga stage. During the Lower Cretaceous only a narrow belt of sea divided the land of Europe from that of Asia towards the north, and this belt disappeared in the Upper Cretaceous, at which period, however, the loss was more than compensated for by the submersion of almost the whole of Southern Russia. During the older Tertiary the northern boundary of this sea advanced southwards. In Miocene times the regions around the Caspian and Black Seas formed part of the Mediterranean and Sarmatian basins, the latter extending eastward to or beyond the present Aral Sea. Lastly, in Post-Pliocene times, the Aralo-Caspian basin covered a large area northward of the Caspian, while the ice of the Glacial Period swept downward from the north over by far the greater part of European Russia, almost reaching the Aralo-Caspian basin. W. N. L.

RECENT BOOKS AND PAMPHLETS.

- Fairchild, H. Leroy.*—History of the New York Academy of Sciences. New York, 1887. From the author.
- Ridgway, R.*—A Manual of North American Birds. Philadelphia, 1887. J. B. Lippincott Co. From the author.
- Barrows, S. J.*—Science and Immortality. Boston. G. H. Ellis. 1887.
- Giles, C. (Rev.).*—The True and the False Theory of Evolution. Philadelphia. W. H. Alden.
- Newberry, J. S.*—The Ancient Civilizations of America; their Origin and Antiquity. Repr. Trans. N. Y. Acad. Sci. Vol. IV. From the author.
- Newberry, J. S.*—Food and Fiber Plants of the North American Indians. Repr. Pop. Sci. Monthly. Nov. 1887. From the author.
- Debierre, Ch.*—L'Homme avant l'Histoire. Paris, 1888. From the author.
- Forbes, S. A.*—Contribution to a Knowledge of the Life-History of the Hessian Fly. 1887. From the author.